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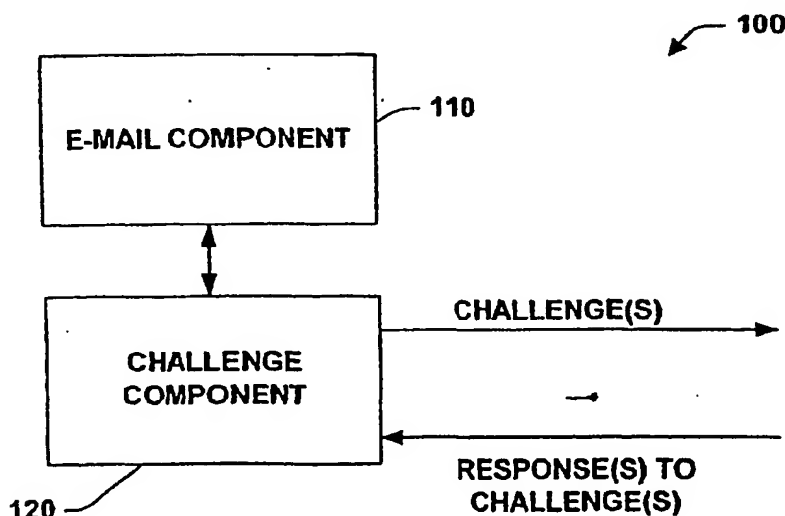
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(54) **SPAM detector with challenges**

(57) A system and method facilitating detection of unsolicited e-mail message(s) with challenges is provided. The invention includes an e-mail component and a challenge component. The system can receive e-mail message(s) and associated probabilities that the e-mail message(s) are spam. Based, at least in part, upon the associated probability, the system can send a challenge

to a sender of an e-mail message. The challenge can be an embedded code, computational challenge, human challenge and/or micropayment request. Based, at least in part, upon a response to the challenge (or lack of response), the challenge component can modify the associated probability and/or delete the e-mail message.



**FIG. 1**

**EP 1 376 427 A3**



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# EUROPEAN SEARCH REPORT

Application Number  
EP 03 00 6814

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
D,Y	US 6 161 130 A (HECKERMAN DAVID E ET AL) 12 December 2000 (2000-12-12) * abstract * * column 1, line 10 - line 14 * * column 4, line 40 - line 49 * * column 8, line 40 - line 66 * * claim 1 *	1-36	G06F17/60
Y	WO 99 10817 A (COBB CHRISTOPHER ALAN) 4 March 1999 (1999-03-04) * abstract * * page 3, line 4 - line 17 * * page 7, line 19 - page 8, line 10 * * page 16, line 19 - line 23 * * page 11, line 18 - line 21 * * page 28, line 27 - line 30 * * figure 7 *	1-36	
Y	US 6 112 227 A (HEINER JEFFREY NELSON) 29 August 2000 (2000-08-29) * abstract * * column 2, line 1 - line 10 * * column 3, line 58 - column 4, line 1 * * column 4, line 15 - line 30 * * figure 2 *	1-36	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
A	JULIAN BYRNE: "MY Spamblock" NEWSGROUP CITATION, 'Online! 19 January 1997 (1997-01-19), XP002267503 news.admin.net-abuse.email Retrieved from the Internet: <URL:http://www.google.com/groups?hl=en&lr= =&ie=UTF-8&oe=UTF-8&selm=32E1A4FD.41C6%40a ny.where&rnum=1> 'retrieved on 2004-01-20! * the whole document *	1-36	G06F
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		21 January 2004	Rosster, T
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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Application Number  
EP 03 00 6814

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	<p>DAVID SKOLL: "How to make sure a human is sending you mail"</p> <p>NEWSGROUP CITATION, 'Online!</p> <p>17 November 1997 (1997-11-17), XP002267504</p> <p>news.admin.net-abuse.usenet</p> <p>Retrieved from the Internet:</p> <p>&lt;URL:http://groups.google.ca/groups?hl=en&amp;lr=&amp;ie=UTF-8&amp;oe=UTF-8&amp;selm=561uge%246on%40bertrand.ccs.carleton.ca&gt;</p> <p>'retrieved on 2004-01-20!</p> <p>* the whole document *</p>	1-36	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
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ON EUROPEAN PATENT APPLICATION NO.**

EP 03 00 6814

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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 6161130	A	12-12-2000	EP WO	1090368 A1	11-04-2001
				9967731 A1	29-12-1999
WO 9910817	A	04-03-1999	US WO	6199102 B1	06-03-2001
				9910817 A1	04-03-1999
US 6112227	A	29-08-2000	NONE		

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